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Subject ⇒ Python

IN PREVIOUS LECTURE (QUICK RECAP) Date-09/07/2020	In today's Lecture (Overview)
<ul style="list-style-type: none">⇒ What Is Ascii Value??<ul style="list-style-type: none">-ord-chr⇒ End command in python⇒ What is Comments In Python??⇒ Range In Python⇒ What Is IDX in Python??⇒ What Is Prime Number??⇒ Questions For Self Practice..	<ul style="list-style-type: none">⇒ What is Def in Python??⇒ What is Return In python??⇒ Arrays In Python⇒ What is List??⇒ What is len??⇒ Append In Python⇒ Questions For Self Practice..

Note⇒ Always give A Name to a variable

⇒ What is Def in Python??

-You can **define** functions to provide the **required functionality**.

-in Python Function blocks begin with the keyword **def followed by the function name** and parentheses (()). ...

-Here are the Uses Of The same Function

Creating a Function

In Python a function is defined using the **def** keyword:

Example;

```
def my_function():  
  
    print("Hello from a function")
```

Calling a Function

To call a function, use the function name followed by parenthesis:

Example;

```
def my_function():  
  
    print("Hello from a function")  
  
my_function()
```

Arguments

-Information can be passed into functions as arguments.

-Arguments are specified after the function name, inside the parentheses. You can add as many arguments as you want, just separate them with a comma.

-The following example has a function with one argument (fname). When the function is called, we pass along a first name, which is used inside the function to print the full name:

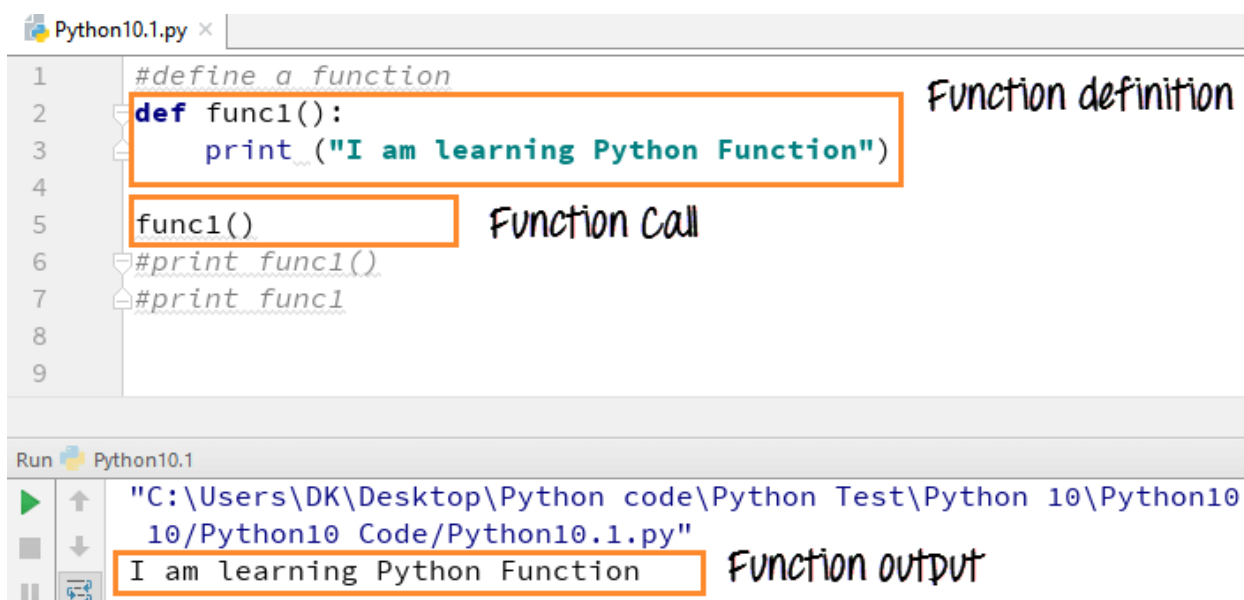
Example;

```
def my_function(fname):  
  
    print(fname + " Refsnes")
```

```
my_function("Emil")
```

```
my_function("Tobias")
```

```
my_function("Linus")
```



The screenshot shows a Python IDE window titled 'Python10.1.py'. The code editor contains the following lines:

```
1  #define a function  
2  def func1():  
3      print("I am learning Python Function")  
4  
5  func1()  
6  #print func1()  
7  #print func1  
8  
9
```

Annotations on the code:

- An orange box highlights the function definition (lines 2-3), with the text "Function definition" written to its right.
- An orange box highlights the function call (line 5), with the text "Function Call" written to its right.

Below the code editor is a 'Run' button and a console window. The console shows the output of the function:

```
Run Python10.1  
"C:\Users\DK\Desktop\Python code\Python Test\Python 10\Python10  
10\Python10 Code\Python10.1.py"  
I am learning Python Function
```

An orange box highlights the output text "I am learning Python Function", with the text "Function output" written to its right.

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⇒ What is Return In python??

A return statement is **used to end the execution of the function call and "returns" the result** (value of the expression following the return keyword) to the caller.

-The statements after the return statements are **not executed**.

-If the return statement is **without any expression**, then the special value None is returned.

Example;

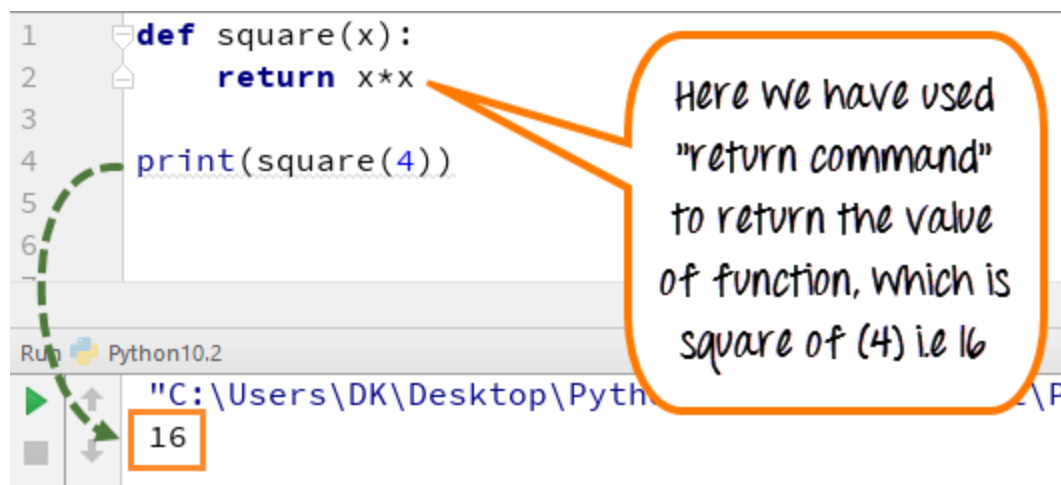
Exit a function and return the sum:

```
def myfunction():  
    return 3+3  
  
print(myfunction())
```

Statements after the return line will not be executed:

Example;

```
def myfunction():  
    return 3+3  
    print("Hello, World!")  
  
print(myfunction())
```



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⇒ Arrays In Python

-Arrays are used to **store multiple values** in one single variable

-An array is a special variable, which can **hold more than one value at a time.**

-Example;

Create an array containing car names:

```
cars = ["Ford", "Volvo", "BMW"]
```

Access the Elements of an Array

You refer to an array element by referring to the *index number*.

Example

Get the value of the first array item:

```
x = cars[0]
```

String Array In Python

Code

```
Fruits = ["Cherry ","banana"," watermelon ," "123"]  
Fruits 1=["chiku", "Strawberry"]  
Fruits. Extend(fruits1)  
Print(fruits)
```

Output

```
['cherry','banana','watermelon', '123' , 'chiku', 'strawberry']
```

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⇒ What is List??

-A list is a collection which is ordered and changeable. In Python lists are written with square brackets.

-Example;

Create a List:

```
thislist = ["apple", "banana", "cherry"]
```

```
print(thislist)
```

To Access Items;

You can access the list items by referring to the index number:

Example;

Print the second item of the list:

```
thislist = ["apple", "banana", "cherry"]
```

```
print(thislist[1])
```



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⇒ What is len??

-The len() function **returns the number of items in an object.**

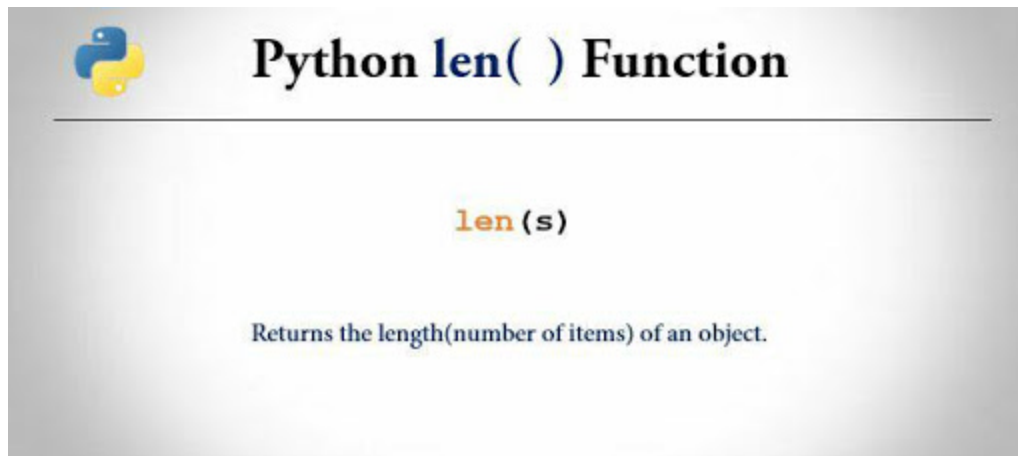
-When the object is a **string**, the len() function returns the number of **characters in the string.**

Parameter	Description
<i>object</i>	Required. An object. Must be a sequence or a collection

Example;

Return the number of characters in a string:

```
mylist = "Hello"  
  
x = len(mylist)
```



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⇒ Append In Python

-The `append()` method appends/adds an element to the end of the list.

-It doesn't return a new list of items but will **modify** the original list by adding the item to the end of the list.

Example;

Add an element to the `fruits` list:

```
fruits = ['apple', 'banana', 'cherry']  
fruits.append("orange")
```


Example;

Add a list to a list:

```
a = ["apple", "banana", "cherry"]
b = ["Ford", "BMW", "Volvo"]
a.append(b)

mylist=[1,2,3]

# Append
mylist.append([4,5,6])
#New List: [1,2,3,[4,5,6]]
```

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⇒ Questions For Self Practice / Assignment For The Day..

Q1. <https://leetcode.com/problems/fizz-buzz/>

Q2. Given a string apple banana sum check for space present in it

Q3. <https://leetcode.com/problems/reverse-integer/>

Q4. Given a string print all the vowels present in it

Q5. <https://leetcode.com/problems/add-strings/>